

### Amendments to the Specification

A magnetic field sensitive sensor arrangement comprises

- ~~a first conductor arrangement with at least two electrical half bridges each having at least two bridge branches, at least one of which contains a magnetic field sensitive semiconductor element, which sensor arrangement supplies a measurement signal depending on the magnetic field strength of a component of a magnetic field at the location of at least one of the half bridges, this being referred to as the measurement field and being aligned in a measurement direction of the sensor arrangement, and~~
- ~~a device which forms the measurement field with a value of its magnetic field strength, which depends on the magnetic permeability of a medium that at least partially surrounds the sensor arrangement, whereby the measurement signal is a measure of the magnetic permeability of the medium.~~

————— A simple sensor arrangement for measuring a medium which affects a magnetic field is thus provided.

Fig. 1

Consistent with an example embodiment, there is a magnetic-field-sensitive arrangement. The sensor arrangement comprises a first conductor arrangement with at least two electrical half-bridges each having at least two bridge branches. At least one of the two branch bridges contains a magnetic-field-sensitive semiconductor element. The sensor arrangement supplies a measurement signal depending on the magnetic field strength of a component of a magnetic field at the location of at least one of the half-bridges, this being referred to as the measurement field and being aligned in a measurement direction of the sensor arrangement. A device forms the measurement field with a value of its magnetic field strength, which depends on the magnetic permeability of a medium that at least partially surrounds the sensor arrangement, whereby the measurement signal is a measure of the magnetic permeability of the medium. Thus a sensor arrangement for measuring a medium that affects a magnetic field is provided.